Check List the journal of biodiversity data

NOTES ON GEOGRAPHIC DISTRIBUTION

Check List 13(3): 2135, 3 June 2017 https://doi.org/10.15560/13.3.2135
ISSN 1809-127X © 2017 Check List and Authors

Distribution extension for *Hydrodynastes melanogigas* Franco, Fernandes & Bentim, 2007 (Serpentes: Dipsadidae: Xenodontinae) in the Araguaia-Tocantins basin, Brazilian Cerrado

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Abstract. We present new records for *Hydrodynastes melanogigas* Franco, Fernandes & Bentim, 2007, from eastern Mato Grosso state, Central Brazil. The four specimens found in the municipalities of Novo Santo Antônio and Ribeirão Cascalheira represent the first records in the state of Mato Grosso, and expand the species' known distribution some 380 km southwest.

Key words. Campos de murundu; Mato Grosso; Hydrodynastini

The snake genus *Hydrodynastes* is associated with aquatic environments and occurs in some river basins of South America (Franco et al. 2007, Murta-Fonseca et al. 2015). It is currently represented by three species: *H. gigas* (Duméril, Bibron & Duméril, 1854), *H. bicinctus* (Hermann, 1804), and *H. melanogigas* Franco, Fernandes & Bentim, 2007. In Brazil, *Hydrodynastes gigas* and *H. bicinctus* have wide geographical distributions, occurring mainly in rivers of the Amazon and Cerrado biomes (Franco et al. 2007, Murta-Fonseca et al. 2015). In contrast, *H. melanogigas* is known only from few localities in the Tocantins river basin in the Brazilian states of Tocantins (municipalities of Lajeado, Palmas, and Porto Nacional) and Maranhão (municipality of Carolina), all within the Cerrado biome (Franco et al. 2007, Silva Jr et al. 2012). Here, we present new records of *H. melanogigas* in the Brazilian Cerrado, and the first records of the species in the state of Mato Grosso.

Four specimens of *H. melanogigas* were obtained during faunal sampling for an environmental impact assessment relating to the construction of the BR-158 (Ribeirão Cascalheira)—on the border between the states of Mato Grosso and Goiás near highway BR-080/MT in eastern Mato Grosso (Fig. 1). Three specimens were recorded inside the municipal limits of Ribeirão Cascalheira, on the banks of the Rio das Mortes (12°50′56″ S, 051°08′03″ W; 12°54′00″ S, 051°06′19″ W; 12°56′33″ S, 051°07′58″ W; datum SAD 69) on 28 November 2013, 4 December 2013, and 7 March 2014, respectively. The fourth specimen was recorded in the municipality of Novo Santo Antonio, on the bank of the Cristalino River (12°48′18″ S, 050°46′44″ W; datum SAD 69) on 1 November 2013.

The individuals of *H. melanogigas* were active during the day, close to local roads traversing "Campos de murundu" (Figs. 2C, D). "Campos de murundu" consists of marshy plains with "islands" of higher, non-inundated ground, on which occur species characteristic of the Cerrado of central Brazil (Silva-Jr. & Felfili 1996). Only one of the 4 recorded specimens was foraging aquatically at the time of the encounter.

The specimens were easily recognized as *H. melanogigas*, based only in the melanistic coloration pattern (cf. Franco et al. 2007), showing a dark dorsal coloration and the absence of a post-ocular line (Figs. 2A, B). The specimens were collected, photographed, and then released in the same places where they were found.

Hydrodynastes melanogigas was described almost 10 years ago and known only for 4 localities within the Tocantins basin before this paper (Franco et al. 2007, Silva Jr et al. 2012). The species was categorized as Endangered [Blab(iii)] in the Brazilian Red List (Brasil 2014) due to its restricted distribution and habitat loss. The records presented here are the first reports of *H. melanogigas* from the mid-west Brazilian state of Mato Grosso and extend the known distribution of this species approximately 380 km to southwest and into the Araguaia basin (Fig. 1).

Franco et al. (2007) suggested that *H. melanogigas* and *Hydrodynastes gigas* are allopatric because the former was known only from the Tocantins basin where the latter does not

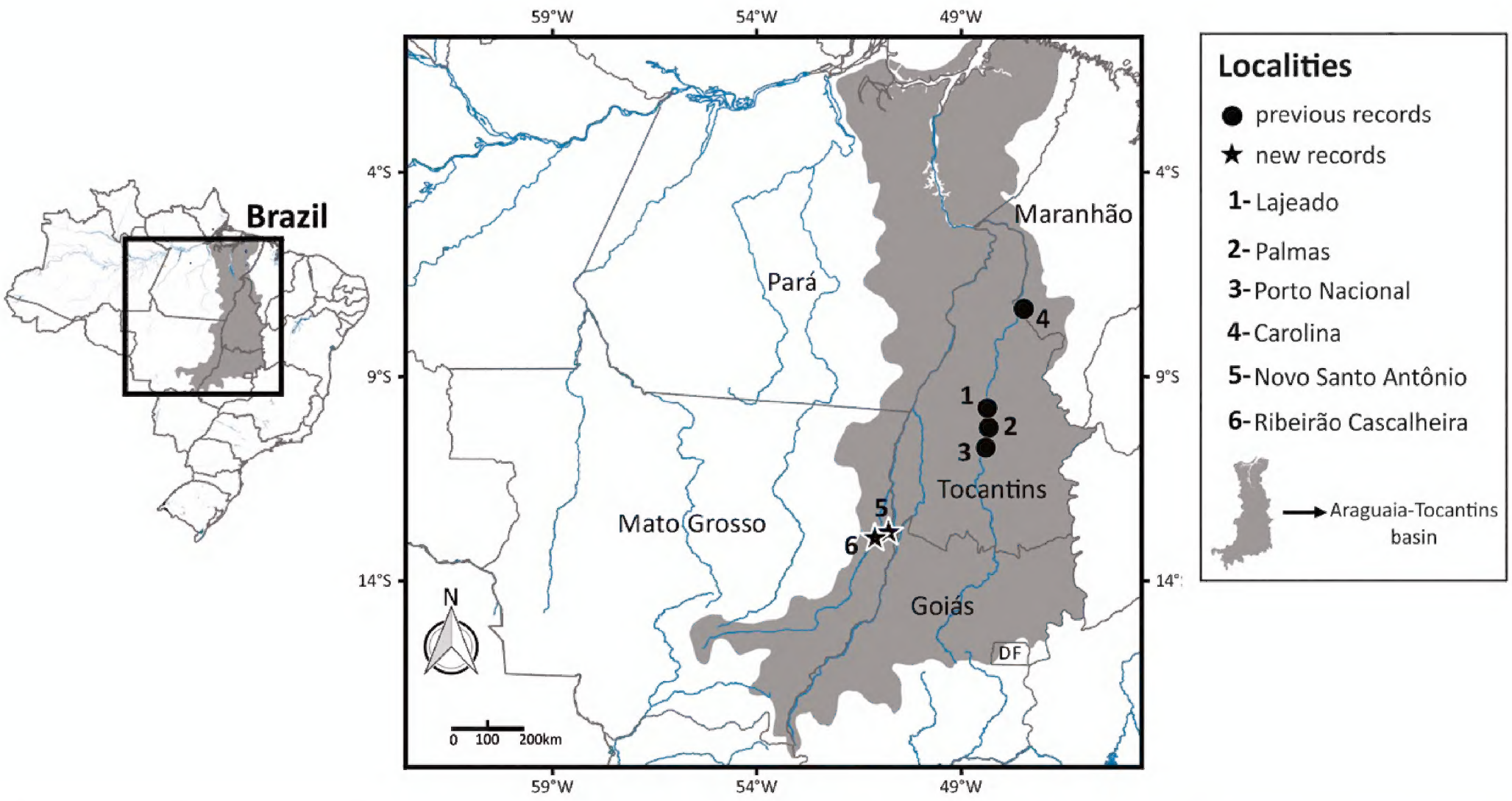

Figure 1. Updated map of the geographical distribution of *Hydrodynastes melanogigas*. Black stars show new records for the species, and black circles show previously known localities (FRANCO et al. 2007: localities 1–3; SILVA JR et al. 2012: locality 4).

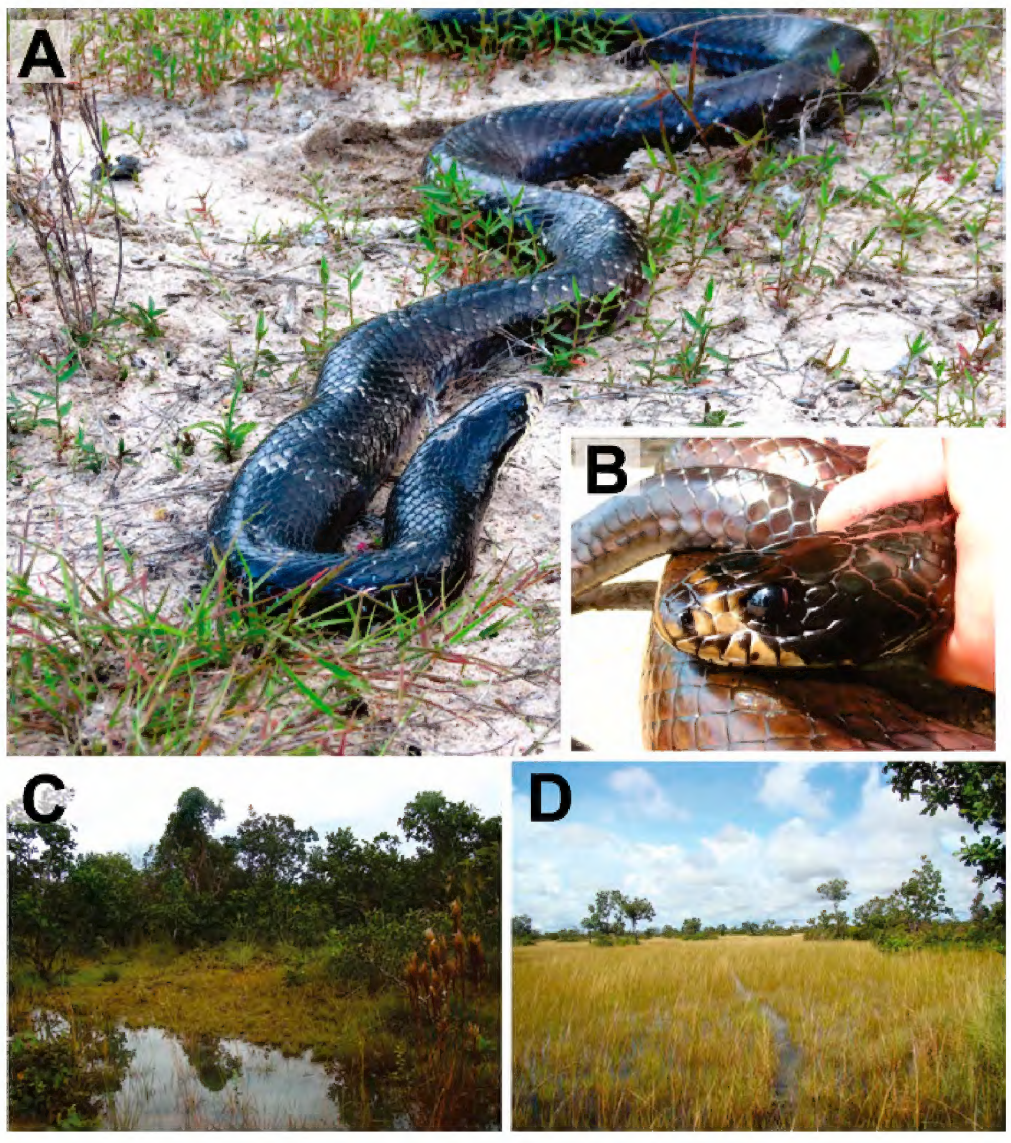

Figure 2. *Hydrodynastes melanogigas* and their habitats, in Mato Grosso, Brazil. **A.** Pattern of color of *H. melanogigas* according to a specimen found on 28 November 2013 in the municipality of Ribeirão Cascalheira. **B.** Lateral detail of the head of the specimen found on 7 March 2014 in the municipality of Ribeirão Cascalheira. **C, D.** View of the environments from which the specimens were recorded in the Brazilian Cerrado.

occur. Our data indicate that these species can be sympatric, with both occurring in the northeastern region of Mato Grosso (see FRANCO et al. 2007: fig. 7). Additionally, the new geographic data presented here can help the Brazilian government and researchers to better assess the conservation status for this species.

ACKNOWLEDGEMENTS

We thank Biota Soluções Ambientais Ltda for support during the fieldwork, and Nilton Cunha for help with the data. Adrian Barnett reviewed the English of the first draft. We thank T. Guedes, P. Cacciali, S. Lotzkat, and F. Grazziotin for comments and suggestions.

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Authors' contributions. GA, DB and TSC collected the snakes, APSJ, GA, DB and SR identified the specimens, APSJ prepared the map, APSJ, GA, DB, SR and TSC wrote the manuscript.

Received: 23 March 2016
Accepted: 5 April 2017
Academic editor: Sebastian Lotzkat